

withdrawal of the rejection of claims 1-15 under 35 U.S.C. §112, second paragraph, is respectfully requested.

The Office Action rejects claims 1-2, 4, 8 and 10 under 35 U.S.C. §101 as claiming the same invention as that of claims 1, 5, 9-11, 15, 19 and 21 of U.S. Patent 6,001,431. Applicants have canceled claims 2-17 and amended claim 1 and respectfully submit the rejection is obviated.

The Office Action rejects claims 3, 5-7, 9, 11 and 13-15 under the judicially created doctrine of Obviousness-Type Double Patenting in view of claims 1-25 of U.S. Patent 6,001,431. Applicants respectfully request this rejection be held in abeyance until allowable subject matter is indicated for the above-identified application.

The Office Action rejects claims 1-15 under 35 U.S.C. §103(a) as unpatentable over Takahashi et al. in view of Fujioka et al. or Nakatani et al. and further in view of Karner et al. This rejection is respectfully traversed.

The present invention is generally directed to a plasma processing method for treating a substrate with a plasma. For example, the process may be used for film formation or etching, but is not limited thereto. The basic feature as recited in the claims resides in that a localized plasma is produced by the use of a slit-like gas inlet or a plurality of inlets arranged in one direction in order to increase a process speed.

Furthermore, a localized plasma is used to treat a surface of a substrate. The localized plasma is formed by the use of a slit-like gas inlet or a plurality of gas inlets arranged in one direction. The formation of the localized plasma can be facilitated, for example, by forming an edge of the gas inlet sharply as disclosed, for example, on page 7, lines 11-13, or by narrowing the gap between the electrodes as disclosed, for example, on page 7, lines 16-17. Specifically, claim 1 recites, inter alia, generating a plasma in a reaction chamber using a raw material gas introduced into said reaction chamber through a plurality of inlets provided in a first electrode, wherein said plurality of inlets are arranged in a first direction. Claim 20 recites, inter alia, preparing first and second electrodes opposed to each other in a reaction chamber, said first electrode having a plurality of gas inlets arranged in a first direction, introducing a reactive gas through said plurality of gas inlets into said reaction chamber and generating a plasma of said reactive gas by applying a voltage between said first and second electrodes wherein said plasma is localized in the vicinity of said plurality of gas inlets. Claim 23, recites, inter alia, preparing first and second electrodes opposed to each other in a reaction chamber, said first electrode

having a plurality of gas inlets arranged in a first direction. Claim 25 recites, inter alia, preparing first and second electrodes opposed to each other in a reaction chamber, said first electrode having a plurality of gas inlets, introducing a reactive gas through said plurality of gas inlets into said reaction chamber and generating a plasma of said reactive gas by applying a voltage between said first and second electrodes wherein said plasma is localized in the vicinity of said plurality of gas inlets. Claim 28 recites, inter alia, generating a plasma of said reactive gas by applying a voltage between said first and second electrodes wherein said plasma is localized in the vicinity of slit-like inlet.

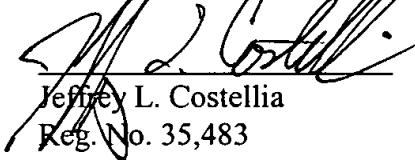
Applicants respectfully submit the cited references, either alone or in combination, fail to at least teach, suggest or disclose the feature of using localized plasma as recited in the claims. Accordingly, Applicants respectfully submit the cited references fail to render obvious the claimed invention. Withdrawal of the rejection of claims 1-15 under 35 U.S.C. §103(a) is respectfully solicited.

Accordingly, Applicants respectfully submit the application is in condition for allowance. Prompt reconsideration and allowance are respectfully requested.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

NIXON PEABODY LLP



Jeffrey L. Costellia
Reg. No. 35,483

JLC/JHV/lfm
Attorney Docket No. 0756-2045

NIXON PEABODY LLP
8180 Greensboro Drive, Suite 800
McLean, Virginia 22102
Telephone (703) 790-9110